



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,288	10/18/2001	Sung-wook Park	1293.1282	5004

49455 7590 03/22/2006

STEIN, MCEWEN & BUI, LLP  
1400 EYE STREET, NW  
SUITE 300  
WASHINGTON, DC 20005

EXAMINER

TOPGYAL, GELEK W

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/981,288

Applicant(s)

PARK ET AL.

Examiner

Gelek Topgyal

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/18/2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24, 42-46 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-24, 42-46 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 01/18/01 and 11/12/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-4 are rejected under 35 U.S.C. 101 because it relates to a data storage medium.

When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. See MPEP 2106.IV.B1.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 5-24, 42-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki.

4. Regarding claims 1-4, Suzuki teaches that video and audio data, subtitles, and other sub-information data like advertisements, still images, logos and titles are recorded on separate portions of the recording medium (see Figure 2, MPEGAV, GRAPHICS, and PICTURES subdirectory). Information about playback synchronization is stored under GRAPHICS\_HEADER file in the form of ATS (Arrival Time Stamp) and PTS (Program Time Stamp) (Col. 6, lines 26-67). Suzuki also teaches and encoder 18 that encodes the incoming video and audio data (Col. 3, lines 2-17), and CPU 21 within the PC encodes all the subtitles, advertisements, still images, logos, and other titles.

5. Regarding claims 5 and 6, Suzuki teaches a system that allows video and audio data, subtitles, and other sub-information data like advertisements, still images, logos, and titles can be recorded onto the medium in separate areas (col. 3, lines 44-61 and Fig. 2). Subtitles meet the limitation of sub-data as claimed, and other sub-information such as advertisements, logos, still images, and titles meet the limitation of extra data. The system controller 17 arranges the sub-image data in one or more files separated from the main data. Suzuki discloses that sub-data in the form of subtitles can be reproduced in synchronization with the audio and video data and the synchronization information is stored in GRAPHICS\_HEADER\_ files in the form of arrival time stamp (ATS) and presentation time stamp (PTS) (col. 5, lines 26-67).

6. Regarding claims 7-12, Suzuki teaches that main data in the form of video and audio data are encoded by encoder 18, and that several different sub-information data

are encoded by the CPU 31, and is further recorded onto the medium (col. 3, lines 1-8, Fig. 2, col.3, lines 44-61). Suzuki also teaches that if the incoming data is already encoded, then no encoding is required, and the recording takes place (col. 4, lines 29-39). Suzuki's system is an interface between a personal computer (PC) and the recording unit and thereby is a digital interface. It is also noted that for any data to be written onto a medium of a different format, the data has to be encoded to the format of the medium, in particular, an optical disk.

7. Reproducing claims 13-24 are rejected on the basis of the recording claims 5-12 above and in addition the following reasons. Suzuki teaches that during reproduction, the optical scans the medium to generate, at any time, the main data comprised of main video and audio data, and sub-images representing subtitles, and other data in the form of advertisements, logos, still images, and titles (col. 4, lines 40-67). As can be seen in Fig. 2, the audio and video data (MPEGAV), subtitles (GRAPHICS), and other information like still images (PICTURES) are stored on separate parts of the medium. The medium and the interface with the reproducing medium and the PC is a digital equipment and is a digital interface. The several types of data read by the optical head is demodulated and error corrected and temporarily stored on a loading channel buffer 7, thereby is a combined stream. The loading channel buffer then splits the signal and sends the audio and video data to their respective decoders 10, and 11. The sub-image data are input to the graphics decoder where titles and other information are decoded. The decoded audio and video data, the sub-image data information are then added

Art Unit: 2616

together with data from the OSD controller to display to the display unit. The output of the audio and video data, subtitles, advertisements, still-images, and titles are output in synchronization according to the information read from the GRAPHICS\_HEADER\_file.  
(col. 5, lines 1-10, col. 6, lines 26-67, and Fig. 2)

8. Claims 42-46 are rejected for the reasons as stated in claims 5-24, above.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujita (US 5,930,450) teaches an apparatus for recording and reproducing from a recording medium to allow for separate types of data to be displayed.

Glynn (US 5,949,752) teaches an apparatus for recording video, audio, and graphics information in separate data packets, and a method for reproducing them.

Higurashi (US 5,963,703) teaches a system that records audio and video data in separate streams on a track.

Yamauchi (US 6,088,507) teaches a system that can record several video tracks, several different audio tracks (languages), several captions (languages), and menu, and still data on several different streams.

Higurashi (US 6,191,900 ) teaches a system with a plurality of heads able to write and read simultaneously onto a recording medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gelek Topgyal whose telephone number is 517-272-8891. The examiner can normally be reached on 8am -5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gelek Topgyal  
3/16/2006

  
THAI TRAN  
PRIMARY EXAMINER